

Chiral thiophosphorylated thioureas: Synthesis, structure, and cyclization reaction

Metlushka K., Tufatullin A., Shaimardanova L., Sadkova D., Nikitina K., Lodochnikova O., Kataeva O., Alfonsov V.

Kazan Federal University, 420008, Kremlevskaya 18, Kazan, Russia

Abstract

© 2014 Wiley Periodicals, Inc. A number of chiral racemic and enantiopure thiophosphorylated thioureas were synthesized by the reaction of 2-aminobutan-1-ol and 1-(α -aminobenzyl)-2-naphthol with O,O-diethyl thiophosphoryl isothiocyanate. It was found that such thioureas undergo the cyclization reaction under basic conditions with hydrogen sulfide elimination and the formation of thiophosphorylated oxasines. XRay single crystal diffraction revealed that the structure of thiourea is close to the prereaction state of the cyclization reaction.

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